

**CLAIMS:**

1. (Currently Amended) A method for unblocking immunization of an individual incapable an immune response to a pathology at a regional lymph node by:

promoting differentiation and maturation of immature dendritic cells in a regional lymph node and;

allowing presentation by resulting mature dendritic cells of antigen to T-cells to gain immunization of the T-cells to the antigen.

2. (Currently Amended) A The method according to claim 1, wherein said promoting step is further defined as administering a natural cytokine mixture (NCM) perilymphatically into lymphatics that drain into lymph nodes regional to a lesion to be treated.

3. (Currently Amended) A The method according to claim 2, wherein the lesion is cancerous or another persistent lesion.

4. (Currently Amended) A The method according to claim 3, wherein the presented lesion is infectious.

5. (Currently Amended) A The method according to claim 1, wherein the antigen is an endogenous antigen.

6. (Currently Amended) A The method according to claim 1, wherein the antigen is an exogenous antigen.

7. (Currently Amended) A The method according to claim 2 wherein said administering step is further defined as injecting the NCM perilymphatically, intralymphatically, intranodally, intrasplenically, subcutaneously, intramuscularly or intracutaneously.

8. (Withdrawn) A method of inducing immunization to cancer or persistent lesions by administering an effective amount of an exogenous antigen and an adjuvant consisting of a natural cytokine mixture (NCM).

9. (Currently Amended) A The method according to claim 2, wherein said administering step is further defined as administering an NCM including IL-1, IL-2, IL-6, IL-8,  $\delta$ IFN and  $\text{TNF}\alpha$ .

10. (Withdrawn) A method according to claim 8 wherein said administering step is further defined as injecting the NCM perilymphatically, intralymphatically, intranodally, intrasplenically, subcutaneously, intramuscularly or intracutaneously.

11. (Withdrawn) A method as set forth in claim 1 further including the step of overcoming mild to moderate T cell depletion and restoring T cell immune response by inducing production of naïve T cells.

12. (Withdrawn) A method according to claim 11, wherein said inducing step is further defined as administering a natural cytokine mixture (NCM).

13. (Withdrawn) A method according to claim 11 wherein said administering step is further defined as injecting the NCM perilymphatically, intralymphatically, intranodally, intrasplenically, subcutaneously, intramuscularly or intracutaneously.

14. (Withdrawn) A method according to claim 12, wherein said administering step is further defined as injecting an NCM including IL-1, IL-2, IL-6, IL-8,  $\delta$ IFN and  $\text{TNF}\alpha$ .

15. (Currently Amended) A The method according to claim 9, wherein said administering step includes administering about 150-600 units of IL-2 per injection in the NCM.

16. (Currently Amended) A The method according to claim 1, wherein said unblocking steps are further defined as codelivering cyclophosphamide and a nonsteroidal anti-inflammatory drug (NSAID).

17. (Withdrawn) A method of treating a cancer or other persistent lesion in an immune suppressed patient by administering an effective amount of a natural cytokine mixture as an adjuvant to endogenous or exogenously administering antigen from the cancer or persistent lesion.

18. (Withdrawn) A method according to claim 14, wherein said administering step is further defined as injecting an NCM including IL-1, IL-2, IL-6, IL-8, TNF $\alpha$  and  $\delta$ IFN.

19. (Withdrawn) A method according to claim 18, wherein said administering step is further defined as injecting an NCM including IL-1, IL-2, IL-6, IL-8, TNF $\alpha$  and  $\delta$ IFN.

20. (Withdrawn) A method according to claim 17, further including the steps of blocking endogenous suppression of T-cells directly or indirectly by the endogenous lesion being treated.

21. (Withdrawn) A method according to claim 11, wherein said inducing step is further defined as codelivering cyclophosphamide and a nonsteroidal anti-inflammatory drug (NSAID).

22. (Currently Amended) A The method according to claim 16, wherein the NSAIDS is selected from the group including ~~INDOMETHACIN, IBUPROFEN~~ indomethacin, ibuprofen, rofecoxib (VIOXX®), celecoxib (CELEBREX®) and other related compounds.

23. (Withdrawn) A method of vaccine immunotherapy including the steps of:

inducing production of naïve T-cells and  
exposing the naïve T-cells to endogenous or exogenous antigens.

24. (Withdrawn) A method according to claim 23, wherein said exposing step is further defined as exposing the naïve T-cells to endogenously processed peptide preparation resident in regional nodes of a patient who possesses a lesion.

25. (Withdrawn) A method according to claim 24, wherein the lesion is cancerous or infectious.

26. (Withdrawn) A method according to claim 23, wherein said exposing step is further defined as administering an exogenously produced antigen.

27. (Withdrawn) A method according to claim 23, wherein said antigen is otherwise non-immunogenic peptide.

28. (Withdrawn) A method according to claim 23, wherein said exposing step is further defined as immunizing the naïve T-cells with matured peptide presenting dendritic cells at a lymph node distal from a lesion to be treated.

29. (Withdrawn) A method of treating lymphocytopenia by administering an effective amount of a natural cytokine mixture.

30. (New) The method according to claim 1 further including the step of stimulating naïve T-cell production.

31. (New) The method according to claim 1 further including the step of actuating dendritic cells to promote antigen presentation.